

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently amended) A method for the production of a polyketide by fermentation, comprising the steps of growing a culture of a polyketide-producing organism at a pH value conducive to cell growth for a time sufficient to generate the producing culture between about pH 6 and about pH 7, lowering the pH of the culture to a value conducive to polyketide product stability between about pH 5 and about pH 6, continuing the fermentation until a maximal titer of polyketide is achieved, and optionally extracting the polyketide from the culture.

2-3. (Canceled)

4. (Original) The method of Claim 1 wherein the pH value conducive to cell growth is about pH 6.5.

5. (Original) The method of Claim 1 wherein the time sufficient to generate a producing culture is the time required to reach a maximum cell density.

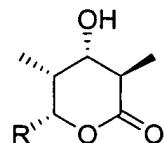
6. (Original) The method of Claim 1 wherein the time sufficient to generate a producing culture is the time required for the culture to reach the end of logarithmic growth.

7. (Original) The method of Claim 1 wherein the time sufficient to generate a producing culture is the time required to begin production of the polyketide.

8-9. (Canceled)

10. (Original) The method of Claim 1 wherein the pH value conducive to polyketide product stability is about pH 5.5 to about pH 6.0.

11. (Original) The method of Claim 1 wherein the polyketide-producing organism is an actinomycete.
12. (Original) The method of Claim 11 wherein the actinomycete is *Streptomyces coelicolor*, *Streptomyces lividans*, *Streptomyces hygroscopicus*, or *Saccharopolyspora erythraea*.
13. (Original) The method of Claim 1 wherein the polyketide-producing organism is an eubacterium.
14. (Original) The method of Claim 13 wherein the eubacterium is *Escherichia coli*, *Pseudomonas fluorescens*, *Pseudomonas putida*, *Pseudomonas aeruginosa*, *Bacillus subtilis*, or *Bacillus cereus*.
15. (Original) The method of Claim 1 wherein the polyketide-producing organism is a myxobacterium.
16. (Original) The method of Claim 15 wherein the myxobacterium is *Myxococcus xanthus* or *Sorangium cellulosum*.
17. (Original) The method of Claim 1 wherein the polyketide-producing organism is a yeast.
18. (Original) The method of Claim 17 wherein the yeast is *Saccharomyces cerevesiae*.
19. (Original) The method of Claim 1 wherein the polyketide produced is a triketide lactone.
20. (Original) The method of Claim 19, wherein the triketide lactone has a structure according to the formula



wherein R is methyl, ethyl, propyl, vinyl, or chloromethyl.

21. (Original) The method of Claim 19 wherein the triketide lactone is selected from the group consisting of

